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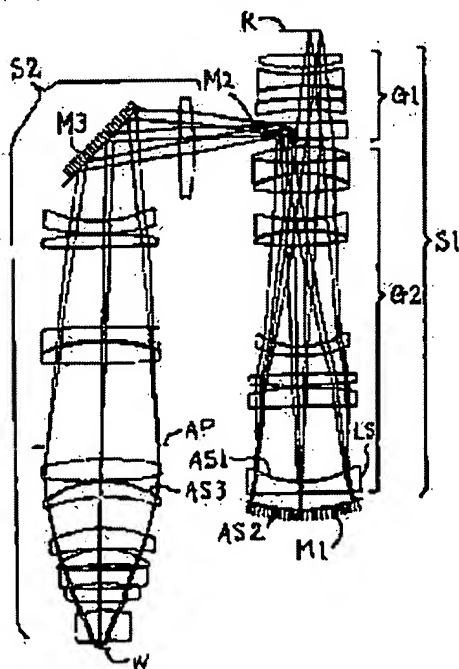
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(54) REFLECTIVE/REFRACTIVE OPTICAL SYSTEM



(57)Abstract:

PROBLEM TO BE SOLVED: To provide a reflective/refractive optical system having a large numerical aperture in the ultraviolet wavelength region, a practical size as a whole, and a resolving power of quarter micron unit, and miniaturizing the respective component members of the optical system.

SOLUTION: This optical system includes a first image forming optical system S1 composed of a refractive member, a concave mirror M1 and a second image forming optical system S2 composed of a refractive member and the pattern of a semiconductor element is projected on a substrate. In this case, between the refractive member composing the first image forming optical system S1 and the refractive member composing the first image forming optical system S2, at least one refractive member is made to have an aspherical surface.

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